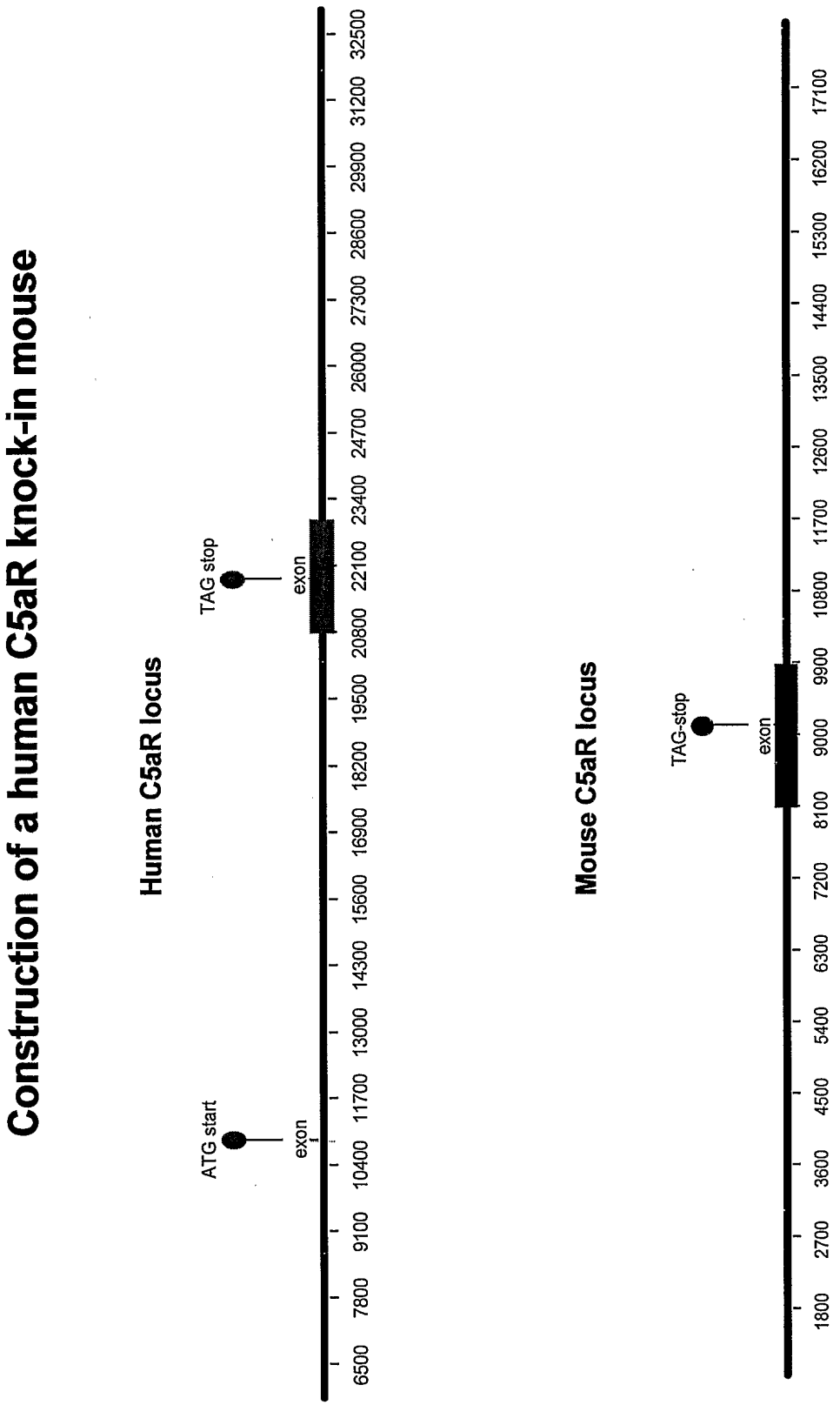

Construction of a human C5aR knock-in mouse
Human C5aR locus
ATG start
exon
TAG stop
exon
6500 7800 9100 10400 11700 13000 14300 15600 16900 18200 19500 20800 22100 23400 24700 26000 27300 28600 29900 31200 32500
Mouse C5aR locus
TAG-stop
exon
1800 2700 3600 4500 5400 6300 7200 8100 9000 9900 10800 11700 12600 13500 14400 15300 16200 17100

Figure 1

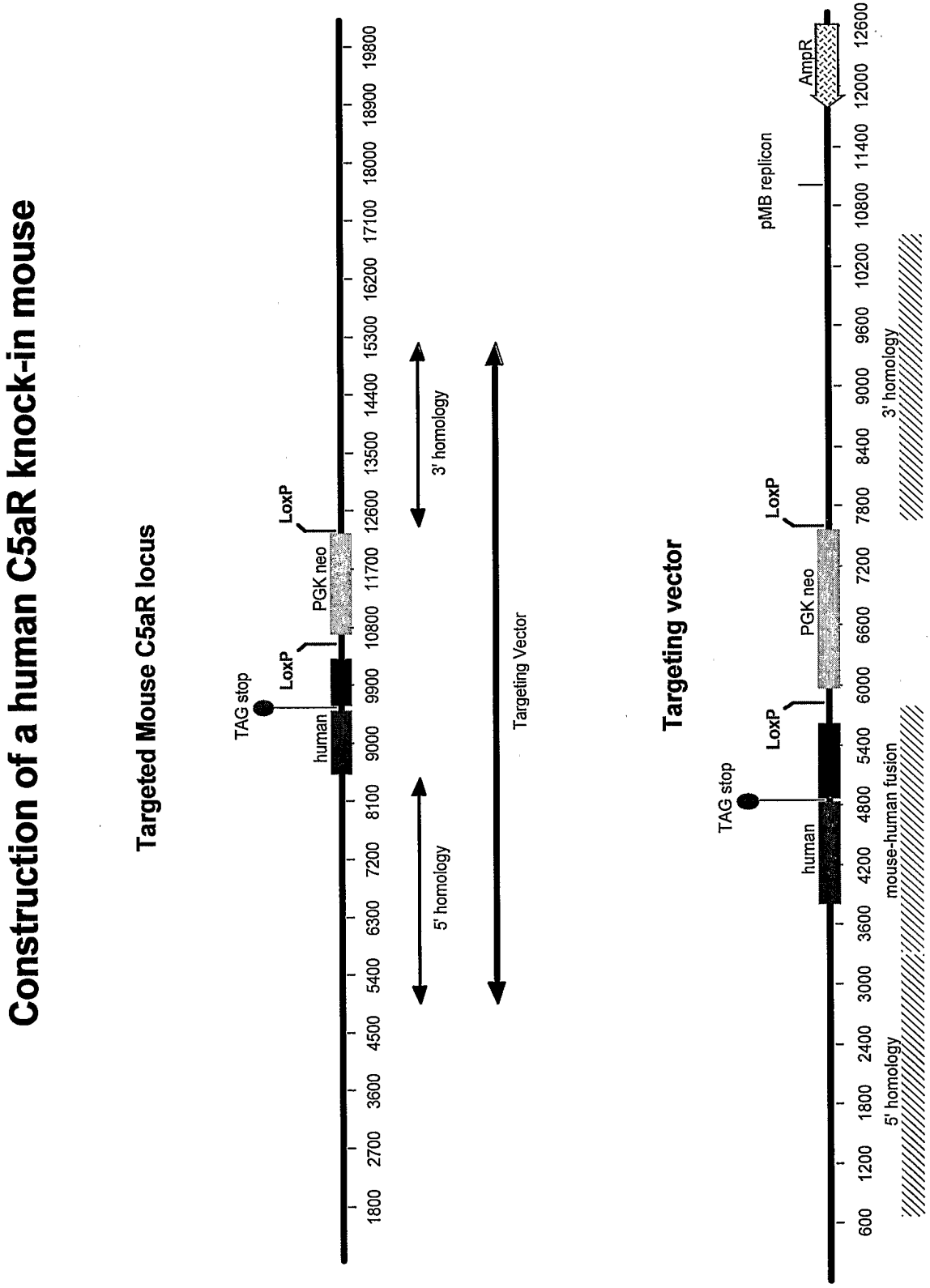


Figure 1 continued

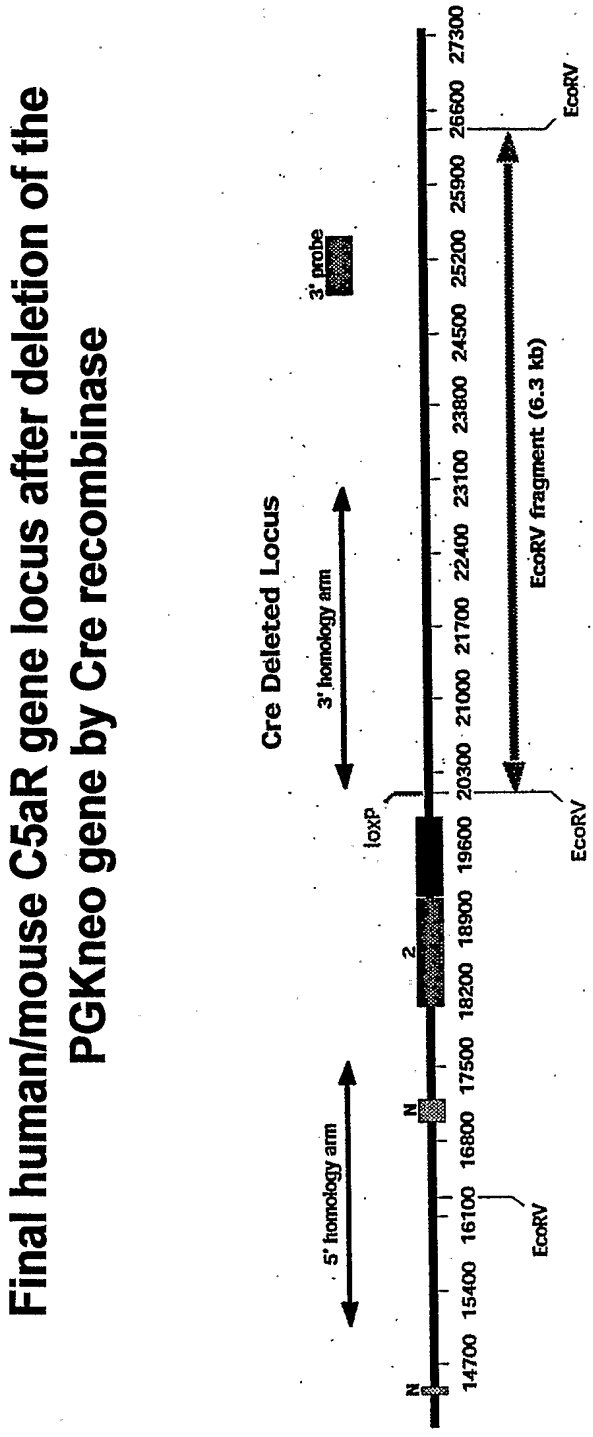

Final human/mouse C5aR gene locus after deletion of the PGKneo gene by Cre recombinase
Cre Deleted Locus
3' probe
3' homology arm
5' homology arm
loxP
EcoRV
EcoRV
EcoRV
EcoRV fragment (6.3 kb)
N
2
N
14700
15400
16100
16800
17500
18200
18900
19600
20300
21000
21700
22400
23100
23800
24500
25200
25900
26600
27300

Figure 2

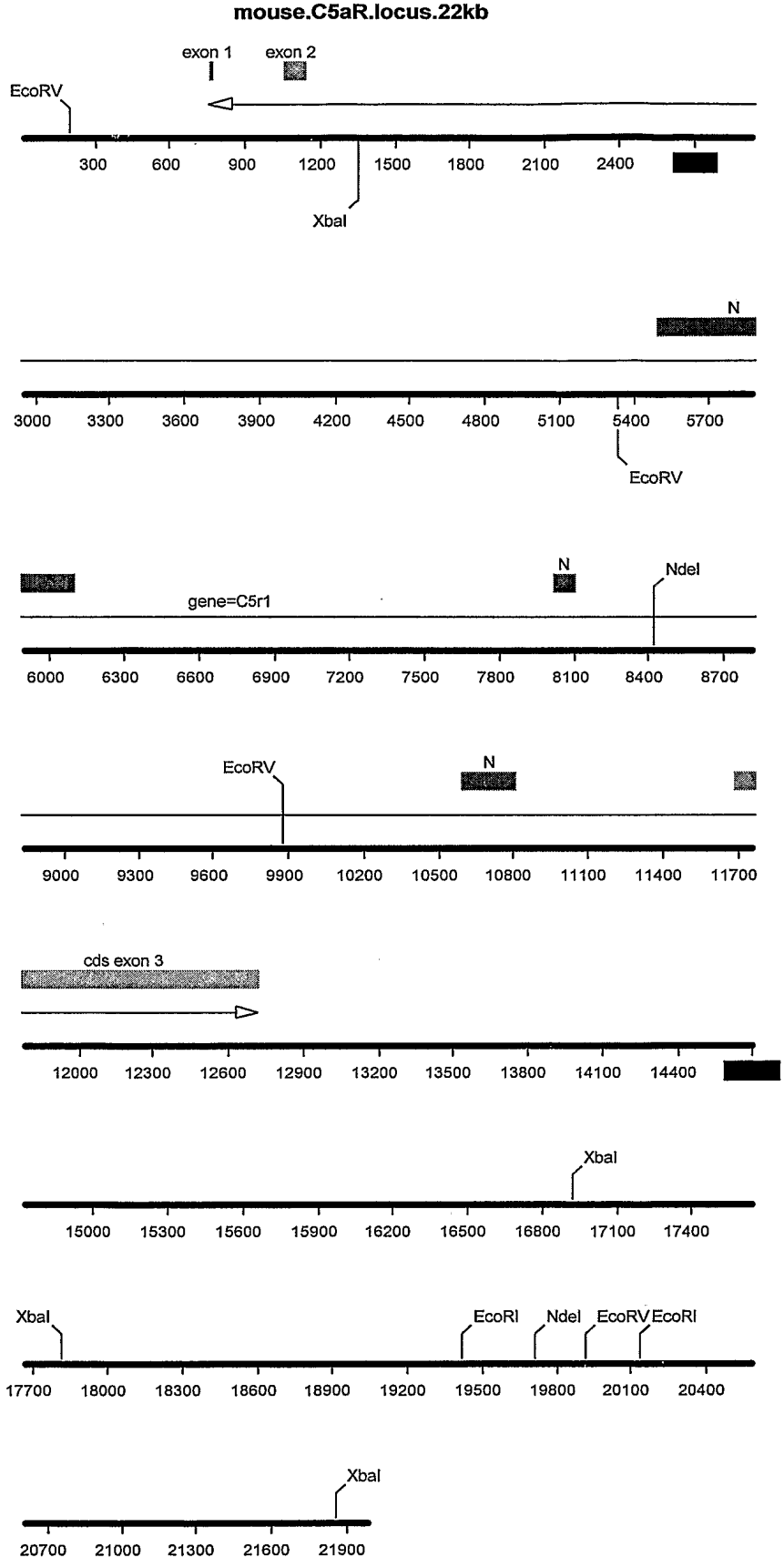
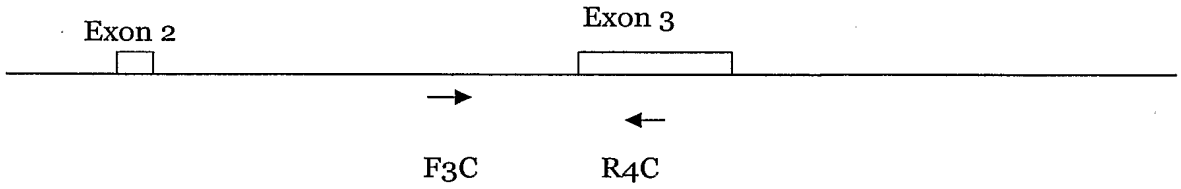

mouse.C5aR.locus.22kb
exon 1
exon 2
EcoRV
300
600
900
1200
1500
1800
2100
2400
XbaI
N
3000
3300
3600
3900
4200
4500
4800
5100
5400
5700
EcoRV
N
NdeI
gene=C5r1
6000
6300
6600
6900
7200
7500
7800
8100
8400
8700
EcoRV
N
9000
9300
9600
9900
10200
10500
10800
11100
11400
11700
cds exon 3
12000
12300
12600
12900
13200
13500
13800
14100
14400
XbaI
15000
15300
15600
15900
16200
16500
16800
17100
17400
XbaI
EcoRI
NdeI
EcoRV
EcoRI
17700
18000
18300
18600
18900
19200
19500
19800
20100
20400
XbaI
20700
21000
21300
21600
21900

Figure 3



Mouse/Human Fusion Locus (not to scale)

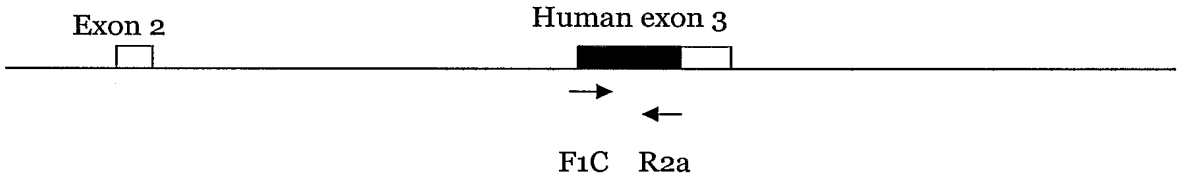


Figure 4

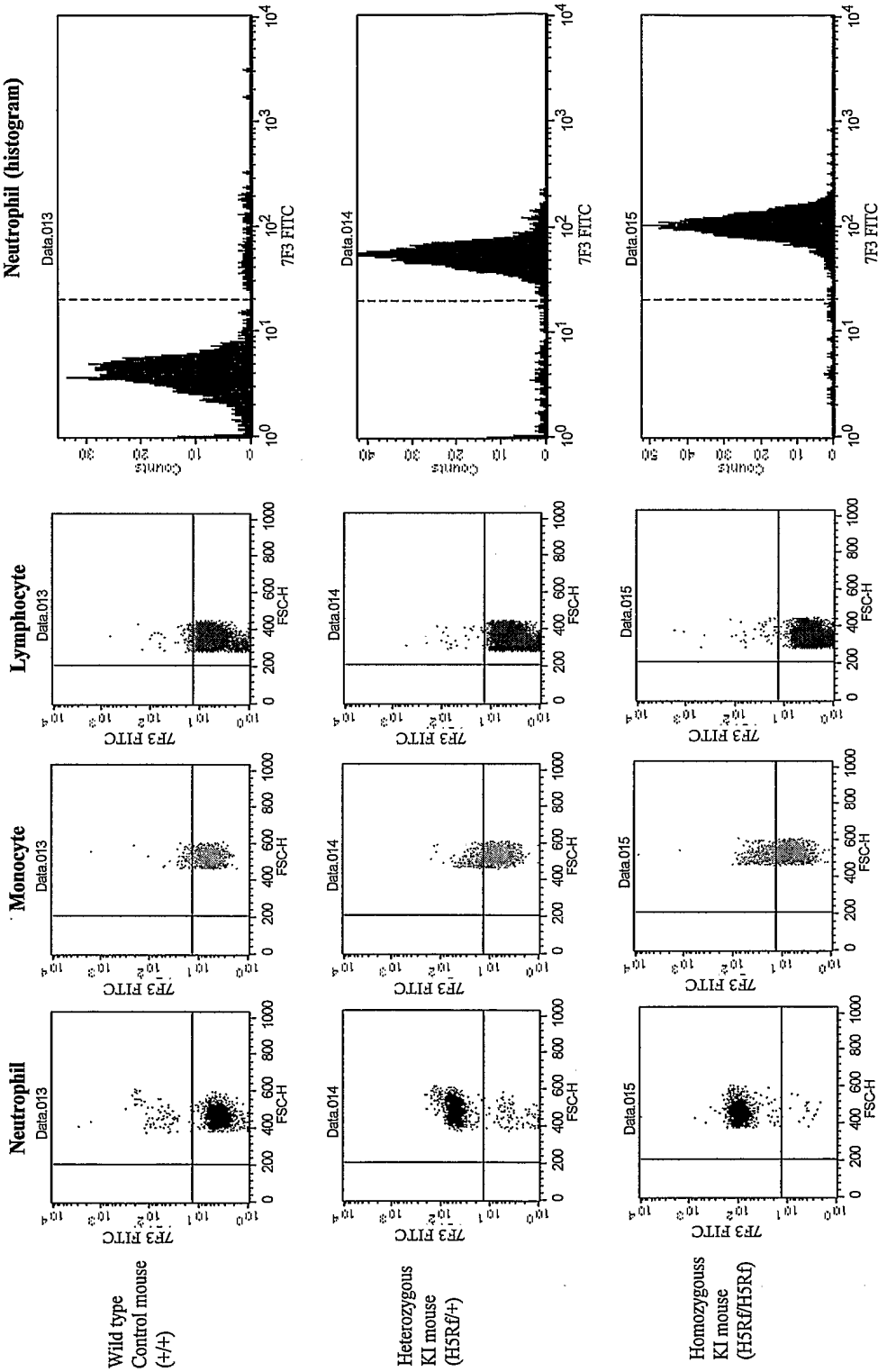

Neutrophil (histogram)
Lymphocyte
Monocyte
Neutrophil
Data.013
Data.014
Data.015
7F3 FITC
FSC-H
Counts
Wild type Control mouse (+/+)
Heterozygous KI mouse (H5Rf/+)
Homozygouss KI mouse (H5Rf/H5Rf)

Figure 5

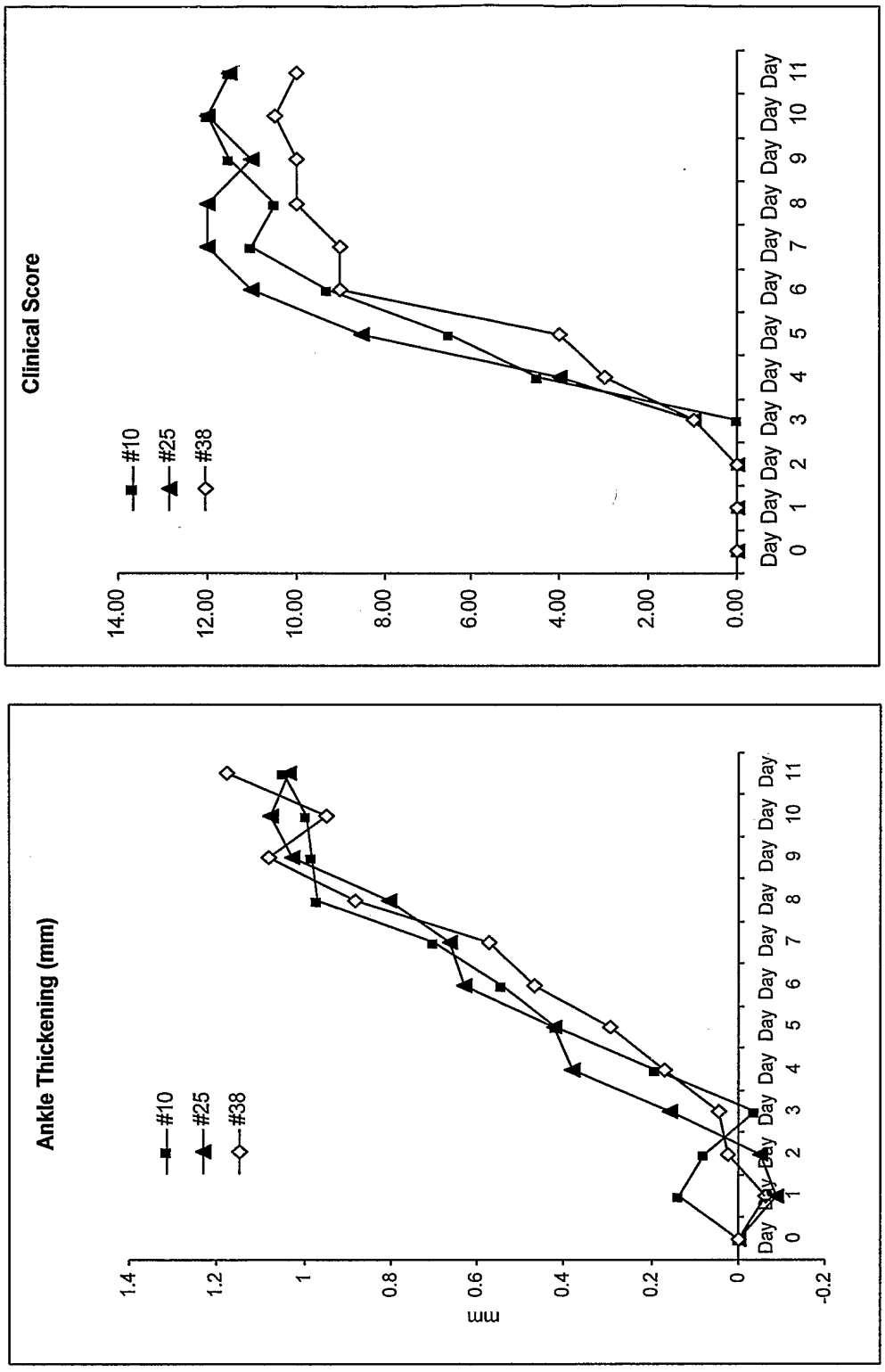

Clinical Score
#10
#25
#38
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Day 0 Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11
Ankle Thickening (mm)
#10
#25
#38
mm
1.4
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
Day 0 Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11

Figure 6

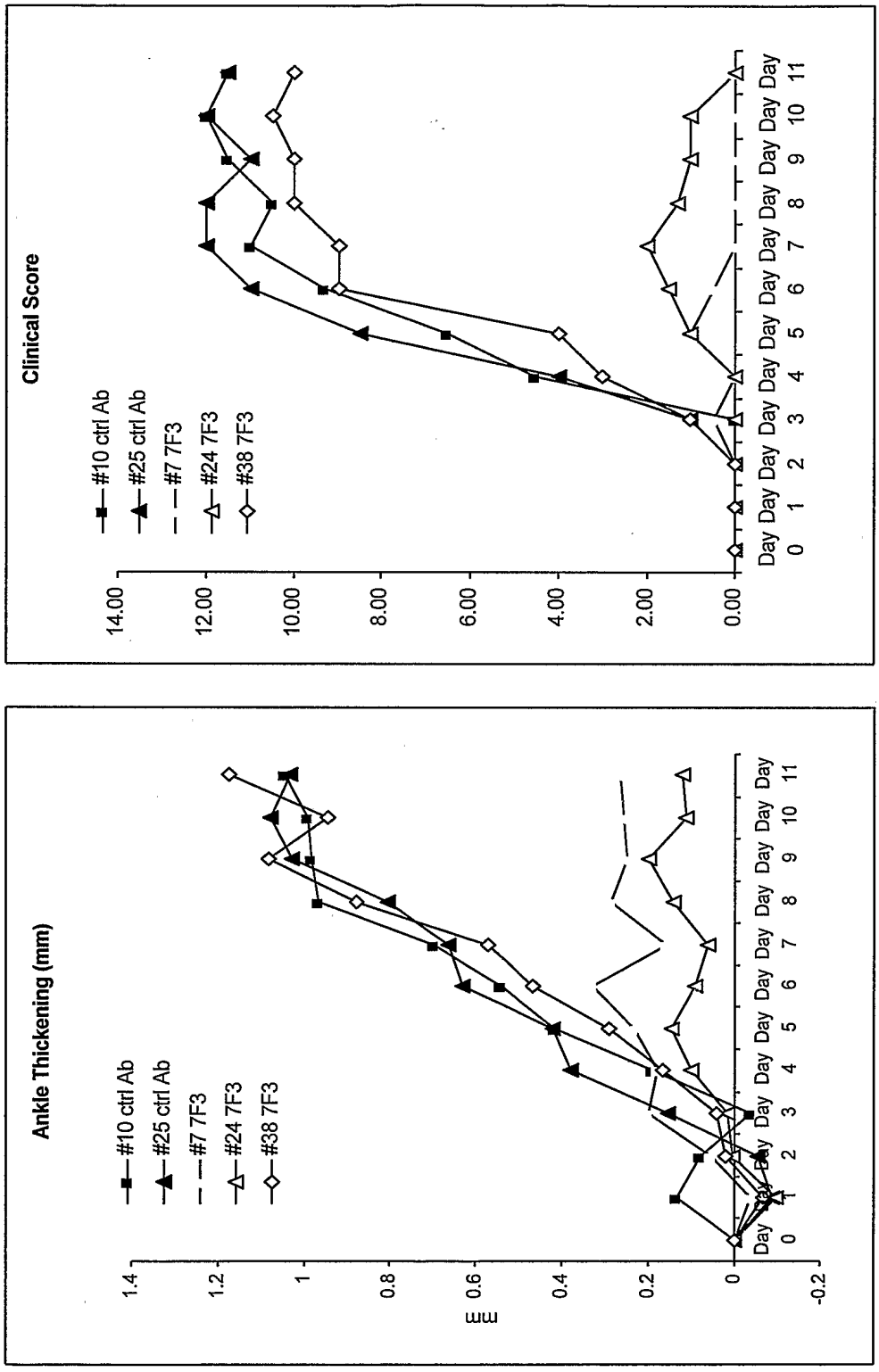

Clinical Score
#10 ctrl Ab
#25 ctrl Ab
#7 7F3
#24 7F3
#38 7F3
14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00
Day 0 Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11
Ankle Thickening (mm)
#10 ctrl Ab
#25 ctrl Ab
#7 7F3
#24 7F3
#38 7F3
mm
1.4
1.2
1
0.8
0.6
0.4
0.2
0
-0.2
Day 0 Day 1 Day 2 Day 3 Day 4 Day 5 Day 6 Day 7 Day 8 Day 9 Day 10 Day 11

Figure 7